

Appln No. 10/735,147

Amdt date September 6, 2005

Reply to Office action of June 3, 2005

**REMARKS/ARGUMENTS**

Claims 1-25 remain in the present application, of which claims 1 and 14 are independent. Claims 1 and 14 have been amended herein. Support for the amendment can be found, for example, on page 9, line 20 to page 11, line 20, and FIG. 6. No new matter has been added. Applicants respectfully request that the amendments to claims 1 and 14 be entered, and that claims 1-25 be reconsidered and allowed.

**I. Rejection of Claims 1-4, 7, 8, 11 and 12 under 35 U.S.C. § 103(a) over Burt and Winston**

Claims 1-4, 7, 8, 11 and 12 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 3,518,766 ("Burt") in view of U.S. Patent No. 5,853,290 ("Winston").

Claim 1 has been amended and now it recites, in a relevant portion, "[a]n ultrasonic dental insert for an ultrasonic dental tool, comprising . . . a connecting body having a proximal end and a distal end, the proximal end attached to the transducer, the distal end having an engagement portion formed thereon. . . at least two O-rings for shock absorption, mounted between the connecting body and the hand grip and around the engagement portion; and a removable tip adapted to engage the engagement portion, wherein the removable tip is made of plastic" (Emphasis Added).

In rejecting claims 1-4, 7, 8, 11 and 12, the Examiner states "Burt shows an ultrasonic dental insert for an ultrasonic dental tool comprising a transducer . . . at least one O-ring 49

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for shock absorption (column 4, lines 39-47) mounted between the connecting body and the hand grip and around the engagement portion, and a removable tip 31 engaging the engagement portion." However, applicants would like to point out that the same referenced portion of Burt cited by the Examiner mentions only "[a]n O-ring 49... serves... to maintain the forward end of crystal transducer 16 as well as the body of workpiece 32 axially centered and aligned and free of all contact with internal surfaces of hand piece 11 or cap 43 and also to provide back pressure against the resilient potting coating 31'." Applicants do not see in Burt any disclosure of an o-ring for shock absorption around the engagement portion of the connecting body or more than one O-ring for shock absorption are around the engagement portion of the connecting body. Further, while Winston discloses a ultrasonic tooth cleaner having tips formed of plastic materials, it does not disclose an O-ring for shock absorption is around the engagement portion of the connecting body.

Therefore, Burt and Winston do not teach or suggest the ultrasonic dental insert of claim 1. Hence, applicants request that the rejection of claim 1 under 35 U.S.C. § 103(a) over Burt and Winston be withdrawn. Since claims 2-4, 7, 8, 11 and 12 depend, directly or indirectly, from claim 1, they include all the terms and limitations of claim 1 in addition to other limitations, which together further patentably distinguish them over the cited references. Therefore, applicants request that the rejection of claims 2-4, 7, 8, 11 and 12 over Burt and Winston be withdrawn as well.

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Further, since claim 2 and 11 have not been otherwise rejected, applicants request that claims 2 and 11 be allowed.

**II. Rejection of Claims 1, 3, 4, 6-8, 12-18, 20-22 and 25 under 35 U.S.C. § 103(a) over Sharp et al. and Winston**

Claims 1, 3, 4, 6-8, 12-18, 20-22 and 25 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,086,369 ("Sharp et al.") in view of Winston.

Amended claim 1 is as recited above.

Claim 14 has been amended to recite, in a relevant portion, "[a]n ultrasonic dental unit comprising: an insert comprising . . . a connecting body having a proximal end and a distal end, the proximal end attached to the transducer, the distal end having an engagement portion formed thereon; a hand grip enveloping at least a portion of the connecting body; at least two O-rings for shock absorption, mounted between the connecting body and the hand grip and around the engagement portion; and a removable tip adapted to engage the engagement portion, wherein the removable tip is made of plastic . . . ." (Emphasis Added).

In rejecting claims 1, 3, 4, 6-8, 12-18, 20-22 and 25, the Examiner contends that Sharp et al. shows "at least one O-ring 35 for shock absorption (column 4, lines 61-63) mounted between the connecting body and the hand grip and around the engagement portion, and a removable tip 16 engaging the engagement portion." (page 3 of the Office Action). However, the O-rings 34 and 35 (regardless of whether they are for shock absorption or not) are not around the engagement portion. In fact, it can be seen in FIG. 1 of Sharp et al. that the O-rings 34 and 35 are

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closer to the transducer 20 on one end than to the working tool 16 (tip) at the other end. Therefore, the O-rings are not around an engagement portion of the connecting body for engaging the tip. Also, as noted above, Winston does not overcome the deficiency of Sharp et al. that the O-rings disclosed in Sharp et al. are not around an engagement portion of the connecting body, as Winston does not mention any O-ring.

Therefore, Sharp et al. and Winston do not teach or suggest claim 1 or claim 14 of the present application. Hence, applicants request that the rejection of claims 1 and 14 under 35 U.S.C. § 103(a) over Sharp et al. and Winston be withdrawn. Since claims 3, 4, 6-8, 12, 13, 15-18, 20-22 and 25 depend, directly or indirectly, from claim 1 or claim 14, they include all the terms and limitations of claim 1 or claim 14 in addition to other limitations, which together further patentably distinguish them over the cited references. Therefore, applicants request that the rejection of claims 3, 4, 6-8, 12, 13, 15-18, 20-22 and 25 over Sharp et al. and Winston be withdrawn as well, and that they be allowed.

**III. Rejection of Claims 5 and 19 under 35 U.S.C. § 103(a) over Sharp et al., Winston and Parisi**

Claims 5 and 19 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Sharp et al. in view of Winston as applied to claims 4 and 18, and further in view of U.S. Patent No. 5,853,290 ("Parisi").

Parisi has been cited for the proposition that it shows "an ultrasonic dental instrument comprising a tip 25 with a conduit

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defined by a conical wall." As such, it does not overcome the deficiency of Sharp et al. and Winston in rejecting claims 1 and 14. Since claims 5 and 19 indirectly depend from claims 1 and 14, respectively, they incorporate all the terms and limitations of claim 1 or claim 14, in addition to other limitations, which together further patentably distinguish them over the cited references. Therefore, applicants request that the rejection of claims 5 and 19 be withdrawn and that they be allowed.

**IV. Rejection of Claims 9, 10, 23 and 24 under 35 U.S.C. § 103(a) over Sharp et al., Winston and Finn**

Claims 9, 10, 23 and 24 have been rejected as allegedly being unpatentable over Sharp et al. in view of Winston as applied to claims 3 and 17 above, and further in view of U.S. Patent No. 6,086,369 ("Finn").

Finn has been cited for the proposition that it "shows a vibratory dental handpiece having a tip 52 which has a threaded attachment portion to engage the engagement portion which is also threaded," and as such, does not overcome the deficiency of Sharp et al. and Winston in rejecting claims 1 and 14.

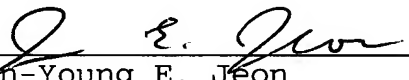
Since claims 9, 10, 23 and 24 indirectly depend from claims 1 and 14, respectively, they incorporate all the terms and limitations of claim 1 or claim 14, in addition to other limitations, which together further patentably distinguish them over the cited references. Therefore, applicants request that the rejection of claims 9, 10, 23 and 24 be withdrawn and that they be allowed.

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**V. Concluding Remarks**

In view of the foregoing amendments and remarks, applicants request an early issuance of a patent with claims 1-25. If there are any remaining issues that can be addressed over the telephone, the Examiner is invited to call applicants' attorney at the number listed below.

Respectfully submitted,  
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